

Water-Data Report CA-2005

11292600 DONNELL LAKE NEAR DARDANELLE, CA

San Joaquin River Basin

LOCATION.--Lat 38°19'46", long 119°57'37" referenced to North American Datum of 1927, Tuolumne County, Hydrologic Unit 18040010, unsurveyed, in Stanislaus National Forest, on left bank in hoist house of Donnell Dam on Middle Fork Stanislaus River, 1.2 mi downstream from Niagara Creek, and 6.9 mi west of Dardanelle.

DRAINAGE AREA .-- 230 mi².

WATER-STAGE RECORDS

PERIOD OF RECORD. --October 1957 to current year. Prior to October 1960, published as "Donnells Reservoir near Dardanelle."

REVISED RECORDS .-- WSP 1930: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4.84 ft above NGVD of 1929 (levels by Oakdale and South San Joaquin Irrigation Districts).

REMARKS.--Lake is formed by concrete arch-type dam completed in 1957. Usable capacity, 64,745 acre-ft, between gage heights 4,720.0 ft, minimum operating head, and 4,917.0 ft, top of spillway gates. Lake is for power and conservation storage. Water passes through a 7.2-mi tunnel to a powerplant and down the Middle Fork Stanislaus River to Beardsley Lake (station 11292800). Records, including extremes, represent total contents at 2400 hours, of which 2,150 acre-ft is below minimum operating head. See schematic diagram of Stanislaus River Basin.

COOPERATION.--Records were provided by Oakdale and South San Joaquin Irrigation District, in connection with Federal Energy Regulatory Commission project no. 2005.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 64,900 acre-ft, May 8, 1963, gage height, 4,917.3 ft; minimum since reservoir first filled, 2,220 acre-ft, Apr. 15, 1983, gage height, 4,720.6 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 64,200 acre-ft, July 19-22, gage height, 4,915.79 ft, July 20; minimum, 5,700 acre-ft, Apr. 1, gage height, 4,739.44 ft.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas and Electric Company, dated Oct. 1, 1956)

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Elevation	Contents	Elevation	Contents	Elevation	Contents
4,720	2,150	4,750	8,220	4,800	22,100
4,725	2,850	4,760	10,800	4,820	28,400
4,730	3,730	4,770	13,400	4,850	38,700
4,735	4,730	4,780	16,200	4,880	49,800
4,740	5,830	4,790	19,100	4,917.3	64,900

11292600 DONNELL LAKE NEAR DARDANELLE, CA—Continued

RESERVOIR STORAGE, ACRE FEET WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005 DAILY OBSERVATION AT 2400 HOURS

Davi	DAILT OBSERVATION AT 2400 HOURS											
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	35,800	26,300	11,300	14,900	12,800	14,100	5,700	13,200	61,800	63,400	61,500	54,400
2	35,600	25,600	10,500	15,200	12,500	13,700	5,820	13,900	61,800	63,300	61,400	54,000
3	35,300	24,800	9,690	15,300	12,300	13,200	6,210	15,100	61,800	63,300	61,400	53,800
4	34,900	24,300	8,940	15,300	12,300	12,600	6,160	16,400	61,900	63,500	61,300	53,400
5	34,500	23,300	8,250	14,900	12,300	12,100	6,120	18,200	61,900	63,800	61,000	53,300
6	34,100	22,700	8,430	14,300	12,500	11,400	6,450	19,600	61,600	64,000	60,900	53,000
7	33,800	22,100	8,680	13,800	12,300	10,800	7,010	20,600	61,600	63,700	60,700	52,600
8	33,500	21,500	8,950	13,600	12,000	10,300	6,850	21,800	61,900	63,600	60,400	52,100
9	33,600	20,800	9,230	13,300	11,800	10,200	6,720	24,500	62,200	63,600	60,100	51,900
10	33,400	20,300	9,510	12,900	11,600	10,100	6,720	25,500	62,600	63,500	60,000	52,000
11	33,400	20,000	9,800	12,400	11,400	10,000	6,650	26,200	62,700	63,200	59,600	52,200
12	33,400	19,500	10,100	11,900	11,700	10,200	6,730	27,000	62,700	63,400	59,400	51,900
13	32,900	19,200	10,400	11,800	11,900	10,600	6,870	28,400	63,100	63,700	59,200	51,300
14	32,500	18,700	10,700	11,500	12,000	10,600	6,780	30,600	63,300	63,900	59,400	50,800
15	32,100	18,000	11,000	11,600	12,200	10,100	6,700	33,600	63,300	64,100	59,700	50,300
16	32,100	17,000	11,300	11,700	12,300	9,500	7,100	43,400	63,100	64,100	59,700	49,700
17	32,100	16,400	11,500	11,800	12,400	8,830	7,760	47,600	62,700	64,100	59,800	49,100
18	32,100	15,800	11,800	11,600	12,700	8,500	8,410	52,700	62,200	64,100	59,900	48,900
19	32,000	15,300	12,000	11,600	13,000	8,210	8,710	58,700	62,100	64,200	59,300	48,600
20	31,900	14,800	12,300	11,800	13,200	7,880	8,730	62,300	62,300	64,200	58,700	48,300
21	31,800	14,400	12,500	11,900	13,600	7,410	8,620	61,600	62,500	64,200	58,100	48,000
22	31,500	14,300	12,800	12,100	13,800	7,460	8,760	61,500	62,600	64,200	57,300	47,800
23	31,400	13,600	12,900	12,200	14,000	7,580	8,940	61,700	62,900	64,000	56,900	47,600
24	31,300	13,000	13,100	12,400	14,000	7,500	9,290	61,600	63,100	63,600	56,600	47,700
25	30,700	13,000	13,300	12,800	13,900	7,120	9,320	61,900	63,000	63,100	56,400	47,700
26	30,100	13,000	13,600	13,200	14,100	7,260	9,670	62,500	62,600	62,500	56,100	47,500
27	29,400	13,100	13,800	13,400	14,300	7,410	10,300	62,500	62,300	62,100	55,900	47,400
28	28,800	13,000	14,100	13,300	14,300	7,330	10,800	62,200	62,100	62,000	55,600	47,200
29	28,000	12,600	14,300	13,200		6,930	11,200	61,100	62,200	62,000	55,400	47,000
30	27,700	12,100	14,500	13,100		6,410	12,000	60,600	63,000	61,900	55,100	46,700
31	27,200		14,700	13,000		6,030		61,100		61,600	54,800	
Лах	35,800	26,300	14,700	15,300	14,300	14,100	12,000	62,500	63,300	64,200	61,500	54,400
Viin	27,200	12,100	8,250	11,500	11,400	6,030	5,700	13,200	61,600	61,600	54,800	46,700
	n, in feet, at			,	,	-,	-,	,00	,	,	,	, ,
		4,765.04		4,768.40	4,773.16	4,740.86	4,764.43	4,908.32	4,912.73	4,909.50	4,892.78	4,871.7
Change i	in contents,	,						•				
•	-9,000	-15,100	+2,600	-1,700	+1,300	-8,270	+5,970	+49,100	+1,900	-1,400	-6,800	-8,100

	Calendar Year 2004	Water Year 2005
Change in contents, in-acre-feet	-4,200	+10,500

11292600 DONNELL LAKE NEAR DARDANELLE, CA—Continued

